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SOLAR TRACING SENSORS FOR MAXIMUM SOLAR CONCENTRATOR EFFICIENCY



TECHNOLOGY READINESS LEVEL: 4

US PATENT PENDING

FIRST GENERATION AND ADVANCED PROTOTYPES HAVE BEEN SUCCESSFULLY TESTED.

TECHNOLOGY SUMMARY

Concentrating Solar Power (CSP) relies on thermodynamic processes to convert concentrated light into useful forms of energy. Accurate sun tracking enables higher concentration ratios and improved efficiency through higher temperature processes and lower losses.

These tracking sensors utilize an improved approach to closed-loop feedback control and have demonstrated high accuracy and performance. Additionally, they have fast response characteristics needed for demanding point focus systems.



POTENTIAL APPLICATIONS

- Parabolic dish & trough solar concentrating collectors
- Solar energy and renewable energy
- Electric utility

TECHNOLOGICAL BENEFITS

- Accurate tracking allows for higher efficiency
- Energy sustainability
- Improved performance of energy concentration
- Increased efficient
- Reduced cost

TECHNOLOGY INQUIRY?

For more information or
licensing opportunities contact
us at

ip@sandia.gov

Refer to SD # 10949

or visit

<https://ip.sandia.gov>